



Drawing on Innovation  
CENTRAL WIRE INDUSTRIES


**Central Wire**  
**6509 Olson Road**  
**Union, IL 60180**

Mr. John Nordine  
U. S. EPA Region 5  
RCRA Enforcement & Compliance Assurance Branch (LU-16)  
77 West Jackson Boulevard  
Chicago, IL 60604

**RE: Central Wire, Union, IL Monthly Progress Report and Attachments**

*AUGUST 2018*

I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Name: *B. Mga* *(for Tom Krawinkel VP Ops)*

Title: *Gen Mgr*

Date: *9/17/18*

**Autumnwood ESH Consultants**

6539 Autumnwood Court  
Mount Pleasant, Wisconsin 53403  
Phone: 262.237.1130

15 September 2018

Mr. John Nordine  
U.S. EPA Region 5  
RCRA Enforcement and Compliance Assurance Branch (LU-16)  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Re: Central Wire, Union, Illinois RCRA CMI Monthly Progress Report, August 2018  
EPA ID: ILD005178975

Dear Mr. Nordine:

Enclosed please find the RCRA CMI Monthly Progress Report for the Central Wire, Inc. (CWI) facility located in Union, Illinois for August 2018.

This report includes the eDMR for the groundwater pump & treat facility, the NPDES laboratory analytical report, which includes the effluent data used in the eDMR and the South Branch Nursery well no. 1 (irrigation) and well no. 2 (restroom) analytical data for Volatile Organic Compounds which are included in the 8-2018 *NPDES Analytical Report* file.

If you have any comments or questions regarding the progress of this project, please contact me at (262) 237-1130.

Sincerely,

**Autumnwood ESH Consultants, LLC**

John W. Thorsen, P.E.

JWT: jt

Encl

cc:	Joyce Munie	IEPA
	Robert Kay	USGS
	Gerald W. Ruopp	Central Wire
	Robert Johnson	Central Wire

**MONTHLY PROGRESS REPORT**  
**Central Wire Union, Illinois Site**  
**August 2018**

**1 Progress Made This Reporting Period**

**Groundwater Pump & Treat System**

In this reporting period Central Wire Inc. (CWI) continued the operation and maintenance of the groundwater extraction and treatment (P&T) system. CWI treated an average of 266,000 gallons per day (GPD) with a maximum daily flow of 275,000 GPD. Table 1, attached, lists the average daily P&T volumes by month from January 2015 through August 2018. The influent flow to the pump and treat system has been reduced by about 30,000 gallons per day per month since November 2017. CWI has received estimates for well rehabilitation has requested corporate approval to address the flow reduction situation. Corporate approval has been received and a work order was sent to Albrecht Well Drilling Inc. on August 24, 2018. Albrecht indicated that work would begin once they received the phosphoric acid would take approximately 5 days.

The total flow on the South Branch Nursery flowmeter on August 24 was 63,086,616 gallons. CWI will read that meter monthly when the South Branch Nursery wells are sampled to collect information on the irrigation pump usage at the nursery over the next year.

The laboratory analytical report for the pump and treat effluent sample is attached. Samples were collected on August 13, 2018 and arrived at Test America Laboratory on August 14, 2018 at 2.7° C.

The monthly NPDES sample met effluent limitations for pH, 1,1,1-Trichloroethane (TCA), Trichloroethene (TCE) and Tetrachloroethene (PCE). The electronic Discharge Monitoring Report (eDMR) for the month is attached to this report.

**South Branch Nursery Well Samples**

The South Branch Nursery well samples [well no. 1 [(irrigation) and well no.2 (restroom)] were collected at the same time and sent to the analytical laboratory in the same batch. There were no volatile organic compound detections found in the South Branch Nursery samples. The analytical data is in the same analytical report as the pump and treat samples. South Branch Nursery sample locations are provided in Figure 1.

**South Branch Nursery Replacement Irrigation and CWI Pump & Discharge Wells at South Branch Nursery**

Central Wire has submitted the McHenry County Storm Water Management permit applications for the replacement irrigation well (if needed) and the pump &

discharge well. CWI has received comments on both applications, has responded to those comments and the South Branch Nursery replacement irrigation well storm water management permit has been issued.

The Pump & Discharge (P&D) Test Well permit was issued and the test well was drilled to collect lithological information to design the well screen to minimize the oxidation of iron on the well screen and the gravel pack surrounding the well screen.

### **Irrigation Well Pumpage**

Historically there has been some concern that the Central Sod irrigation wells, located downgradient from the chlorinated plume, have impacted the movement of the plume. As a result, CWI has been monitoring groundwater level fluctuations at the most downgradient monitoring well, DGW-2, since 2010.

Over the month Central Wire personnel read the hour meter on the Central Sod well pump engines for the Route 176 and the Kunde Rd. irrigation wells on a weekly basis. Table 2 provides the data collected from the hour meters on the pump engines. This data is used in Table 3, attached, which plots the groundwater elevations against the daily precipitation and weekly irrigation well pumpage at Central Sod farms. The precipitation data is from the National Weather Service's Marengo station.

**Table 2**  
**Summary of 2018 Irrigation Pumping Hours per Week at Central Sod Farms**  
**August 1 through August 31, 2018**

Date of Hour Meter Reading	Route 176 Pump		Kunde Rd. Pump		Hours of Irrigation Well Pumping/Week
	Hour Meter Reading	Hours Pumped	Hour Meter Reading	Hours Pumped	
7/23/2018	7093	0	4898	0	
8/1/2018	7216	123	4963	65	188
8/6//2018	7224	8	4980	17	25
8/13/2018	7253	29	4999	19	48
8/20/2018	7279	26	5022	23	49
8/27/2018	7325	46	5040	18	64
8/31/2018	7325	0	5040	0	0
<b>Totals</b>		<b>232</b>		<b>142</b>	<b>374</b>

Regarding comparing the manual groundwater measurements to the data logger, the last data logger reading of the water level in DGW-2I on 8/1/2018 at 3:44 pm was 24.20 feet or 6.14 feet below the top of casing. The manual measurement on that day at about 4:00 pm was 6.14 feet below the top of casing. On 8/31/2018 the manual measurement of the depth of the water below the top of casing in DGW-2I was 5.39 feet below the top of casing at about 1:50 pm. The last data logger

reading of the amount of water above the data logger at 1:47 pm was 24.95 feet or 5.39 feet below the top of casing (30.34 feet [data logger below top of casing] – 24.95 feet = 5.36 feet).

Table 3 shows the groundwater levels plotted against daily precipitation and weekly irrigation well pumpage from August 1 to August 31, 2018.

The groundwater elevation during this period reached its highest level on August 30 at 816.104 feet above mean sea level. The groundwater elevation reached its low on August 27, 2018 at 815.258 feet above mean sea level. The variance during August was 0.846 feet in monitoring well DGW-21.

## 2 Summary of Validated Data and Results

### **Pump & Treat System Monthly NPDES Samples**

The permit limitations and analytical results are shown in Table 4, below. There were no effluent limitation exceedances.

**Table 4**  
**Central Wire Union Illinois Pump & Treat Effluent Analytical Results**

Parameter	Effluent Limitation (Daily Maximum), µg/L	Effluent Analytical Results, µg/L
1,1,1-Trichloroethane	20	0.86 J
Tetrachloroethene	20	1.5
Trichloroethene	20	1.3

Table 5 plots the effluent quality from the NPDES grab samples collected monthly of the pump & treat effluent. After the higher concentrations of the effluent limited chemicals were found in the May and June 2018 pump and treat effluent samples, they have come back down to 1.5 mg/L or below, but TCE and PCE are above the averages from August 2017 to August 2018. There is no need to take any action immediately or into the future except to monitor the monthly analytical results. The values found in August 2018 were 23 times lower than the effluent limitation of TCA, 13 times lower for PCE and 15 times for TCE.

### **South Branch Nursery Well Samples**

Central Wire collected samples at the South Branch Nursery [well no. 1 (irrigation) and well no.2 (restroom)] on August 13, 2018. See Figure1 for location of these wells. There were no detections of volatile organic compounds in either well. These results are in the attached analytical report.

This NPDES analytical report also has environmental analytical results for CWI's North and South Seepage Ponds. These ponds are Illinois EPA-regulated seepage ponds for CWI's rinse waters from the annealing process, non-contact cooling water, boiler blowdown and for storm water collection.

- 3 **Upcoming Events/Activities Planned** – CWI will continue to operate the existing remediation systems. Effluent samples will be collected, analyzed and reported as required in our NPDES permit.

CWI has reapplied for the NPDES permit for this system adding a second discharge for the pump and discharge system and awaits permit issuance by IEPA. The current permit expired on May 31, 2018. IEPA has verbally informed CWI that they could continue to operate their pump and treat system under the expired permit until the new permit is issued. The new permit has been public noticed and there have been requests for a public hearing. IEPA is currently making the determination on holding a public hearing. They would like to avoid a hearing.

CWI has submitted a water well permit applications to the McHenry County Health Department for the replacement irrigation well for South Branch Nursery and the pump and discharge well and has responded to comments.

The phosphoric acid has arrived at CWI. CWI is trying to coordinate the abandonment of the test well with the rehabilitation of the extraction wells.

CWI plans to meet as needed with Goodmark Nurseries work out details and schedules and met with them on June 18, 2018 to identify the desired location and receive approval from Goodmark Nurseries. That approval was obtained.

Samples will continue to be collected at the South Branch Nursery wells [well no. 1(irrigation) and well no.2 (restroom)] every month when the irrigation pumps are operating, usually between May and November of each year.

- 4 **Anticipated Problem Areas and Recommended Solutions** – None.

- 5 **Key Personnel Changes** – None.

- 6 **Target and Actual Completion Dates** – This project has not deviated from the project schedule.